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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,718	06/12/2006	Daisuke Kumaki	0553-0505	6557
26568	7590	07/27/2009	EXAMINER	
COOK ALEX LTD SUITE 2850 200 WEST ADAMS STREET CHICAGO, IL 60606			CAO, PHAT X	
			ART UNIT	PAPER NUMBER
			2814	
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			07/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,718	Applicant(s) KUMAKI ET AL.	
	Examiner Phat X. Cao	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 3-5,8-11,14,16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,12,13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/8/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to because of the following informalities: lines 10-11, “a forth substance” should be changed to “a fourth substance”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 6-7, 12-13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Liao et al (US 6,717,358).

Regarding claim 1, Liao (Figs. 1 and 2) discloses a light emitting device comprising: a first electrode (140), a laminated body including a layer (120.N) containing a light emitting substance (Nth EL UNIT) in contact with the first electrode (140), a layer (133) having an acceptor level (P-type doped organic layer) in contact with the laminated body (120.N), a layer (131) having a donor level (N-type doped organic layer) in contact with the layer (133) having the acceptor level, and a second electrode (110) in contact with the layer (131) having the donor level.

Art Unit: 2814

Regarding claim 6, Liao (Figs. 1 and 2) discloses a light emitting device comprising: a first electrode (140), a laminated body including a layer (120.N) containing a light emitting substance (Nth EL UNIT) in contact with the first electrode (140), a first layer (133) containing a first substance (P-type doped organic layer) of which a hole mobility is higher than an electron mobility and a second substance that can accept an electron from the first substance (column 7, lines 25-30) in contact with the laminated body (120. N), a second layer (131) containing a third substance (N-type doped organic layer) of which an electron mobility is higher than a hole mobility and a fourth substance that can donate an electron to the third substance (column 7, lines 20-25) in contact with the first layer (133), and a second electrode (110) in contact with the second layer (131).

Regarding claims 2 and 7, Liao (Fig. 2) further discloses that the second layer (131) having the donor level includes tris(8-quinolinolato) aluminum (abbreviation : Alq3) (column 7, lines 45-51)

Regarding claims 12-13 and 15, Liao (Fig. 2) also discloses that the laminated body (120.N) has a single layer structure, and when a potential of the second electrode 110 (anode) is set higher than a potential of the first electrode 140 (cathode), a hole generated in the layer (133) having the acceptor level is injected in the laminated body (120.N) because of the hole transporting from anode to cathode.

Response to Arguments

4. Applicant's arguments filed 5/6/09 have been fully considered. The ground of rejection under Matsumoto is withdrawn because of the certified English translation

Art Unit: 2814

submitted on 6/2/09. However, Applicant's arguments with regard to the ground of rejection under Liao are not persuasive.

Applicant argues that Figs. 1-2 of Liao do not suggest the claimed feature of "a second electrode in contact with the layer having the donor level" because layer 131 (in connecting unit 130) cannot be in contact with the second electrode 110.

It should be noted that claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 494F. 2d 1399, 181 USPQ 641 (CCPA 1974). In this case, it appears that Applicant argues that a second electrode must be in directly and physically contact with the layer having the donor level. However, the limitation on which Applicant relies (i.e., directly and physically contact) does not require by the claim language. Therefore, as broadly interpreted, the claimed feature of "a second electrode in contact with the layer having the donor level" does not exclude a second electrode in electrically contact with the layer having the donor level. Therefore, Liao does suggest the invention as claimed because the second electrode 110 is in electrically contact with the layer having the donor level 131 (in connecting unit 130).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2814

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phat X. Cao whose telephone number is (571)272-1703. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571)272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. X. C./

/Phat X. Cao/

Application/Control Number: 10/582,718

Page 6

Art Unit: 2814

Primary Examiner, Art Unit 2814

Primary Examiner, Art Unit 2814